We claim:

1. An integrated optical circuit comprising:

an input waveguide;

an imaging multimode interference device adapted to substantially remove all modes but a fundamental mode of an optical signal received from said input waveguide; and

an optical power splitter structure in optical communication with said imaging multimode interference device.

2. The optical circuit of claim 1 wherein said multimode interference device includes a primary output in optical communication with said optical power splitter structure and a secondary output in optical communication with a dump port.

3. The optical circuit of claim 1 wherein said imaging multimode interference device is a 1-to-1 device.

4. The optical circuit of claim 3 wherein said imaging multimode interference device has a structure designed to reduce optical backreflections.

5. A method for suppressing propagating lateral waveguide field oscillations at the input of an optical power splitter structure comprising fabricating an imaging multimode interference device in optical communication with said optical power splitter structure.

6. The method of claim 5 wherein said multimode interference device includes a primary output in optical communication with said optical power splitter structure and a secondary output in optical communication with a dump port and said method further comprises receiving an error signal from said dump port and monitoring said error signal for a substantial change.

7. The method of claim 5 wherein said optical power splitter structure is a component of a interferometric modulator.

8. The method of claim 7 wherein said interferometric modulator is a Mach-Zehnder modulator.

9. An integrated optical circuit comprising an imaging multimode interference device in optical communication with an optical power splitting structure.

10. An integrated optical circuit comprising:

a semiconductor optical amplifier having an angled output; and

an imaging multimode interference device between said semiconductor optical amplifier and said angled output.

11. The integrated optical circuit of claim 10 wherein said further has an angled input and said imaging multimode interference device is a first imaging multimode interference device and said integrated optical circuit further comprises a second imaging multimode interference device between said semiconductor optical amplifier and said angled input.

12. An integrated optical circuit comprising:

a waveguide device having an angled output; and

an imaging multimode interference device between said waveguide device and said angled output.

13. Use of an imaging multimode interference device as an optical mode stripper in an integrated optical circuit.

14. Use of an imaging multimode interference device to substantially remove all modes but a fundamental mode of an optical signal received at an input to said multimode interference device.

15. A semiconductor optical amplifier comprising:

an imaging multimode interference device adapted to substantially remove all modes but a fundamental mode of an optical signal received from an input waveguide; and

an electrode in contact with said multimode interference device adapted to change the optical properties of said multimode interference device through application of an electrical signal.

16. An optical attenuator comprising:

an input waveguide;

an imaging multimode interference device adapted to substantially remove all modes but a fundamental mode of an optical signal received from said input waveguide; and

an electrode adapted to apply a bias voltage to a surface of said imaging multimode interference device.